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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/017,760   | 12/14/2001  | Young C. Ko          | KCC-17,473          | 8158             |
| 35844  | 7590        | 01/20/2004           | EXAMINER            |                  |
| PAULEY PETERSEN KINNE & ERICKSON<br>2800 WEST HIGGINS ROAD<br>SUITE 365<br>HOFFMAN ESTATES, IL 60195 |             |                      | YAO, SAMCHUAN CUA   |                  |
|  |             | ART UNIT             | PAPER NUMBER        |                  |
|  |             | 1733                 |                     |                  |

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | Application No. | Applicant(s) |
|------------------------------|-----------------|--------------|
|                              | 10/017,760      | KO ET AL.    |
| Examiner                     | Art Unit        |              |
| Sam Chuan C. Yao             | 1733            |              |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 December 2003.

2a)  This action is **FINAL**.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-32 is/are pending in the application.  
4a) Of the above claim(s) 7 and 9 is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-6, 8 and 10-32 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a)  The translation of the foreign language provisional application has been received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_  
4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102/103***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 10, 12-19, and 21-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Itoh et al (US 4,892,754) for reasons of record set forth in the last office action in numbered paragraph 7 dated 09-14-03, and for reasons set forth hereinafter.

In light of the following passage (for example), “... a [1<sup>st</sup>] method wherein a radical polymerization initiator is applied uniformly in the form of a separate solution from the aqueous monomer to the fibrous substrate, to which the aqueous monomer has previously been applied, by spraying or the like and is decomposed on the fibrous substrate and a [2<sup>nd</sup>] method wherein a radical polymerization initiator is applied uniformly in the form of a separate solution from the aqueous monomer to the fibrous substrate, and then the aqueous monomer is uniformly applied thereto, by spraying, coating or the like” (bold face, emphasis

and words added; col. 6 lines 49-59), it is taken that, the teachings of Itoh et al envisions sequentially spraying (i.e. applying in a form of droplets) 1<sup>st</sup> and 2<sup>nd</sup> superabsorbent precursor compositions to a preformed fibrous web. Note that, since Itoh et al expressly teaches "*the aqueous monomer is uniformly applied thereto, by spraying*" in the 2<sup>nd</sup> method, and since Ito et al also applying a 2<sup>nd</sup> superabsorbent precursor composition in a form of a mist (column 8 lines 41-46), at least in the above 1<sup>st</sup> method that, Itoh et al is taken to reasonably envision uniformly applying a radical polymerization initiator by spraying. In any event, it would have been obvious in the art to use a spraying method in a sequential application of 1<sup>st</sup> and 2<sup>nd</sup> superabsorbent precursor compositions to a preformed fibrous web, because there are only three conventional methods (impregnating, spraying, and coating) for applying these compositions suggested by Itoh et al (col. 6 lines 9-59), and Ito et al also teaches sequentially applying a 1<sup>st</sup> superabsorbent precursor composition and a 2<sup>nd</sup> superabsorbent precursor composition to a fibrous substrate wherein the 2<sup>nd</sup> superabsorbent precursor composition is in form of a mist (col. 8 lines 41-46). Moreover, it is conventional in the art to impregnate or coat a fibrous substrate with a polymeric composition by spraying.

4. Claims 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Itoh et al (US 4,892,754) for reasons of record set forth in the last office action in numbered paragraph 7 dated 09-14-03, and for reasons set forth hereinafter.

In light of the following passage, “*... a [1<sup>st</sup>] method wherein a radical polymerization initiator is applied uniformly in the form of a separate solution from the aqueous monomer to the fibrous substrate, to which the aqueous monomer has previously been applied, by spraying or the like and is decomposed on the fibrous substrate and a [2<sup>nd</sup>] method wherein a radical polymerization initiator is applied uniformly in the form of a separate solution from the aqueous monomer to the fibrous substrate, and then the aqueous monomer is uniformly applied thereto, by spraying, coating or the like*” (bold face and words added; col. 6 lines 49-59), it is taken that, the teachings of Itoh et al envisions sequentially spraying (i.e. applying in a form of droplets) 1<sup>st</sup> and 2<sup>nd</sup> superabsorbent precursor compositions to a preformed fibrous web. Note that, since Itoh et al expressly teaches “*the aqueous monomer is uniformly applied thereto, by spraying*” in the 2<sup>nd</sup> method, and since Ito et al also applying a 2<sup>nd</sup> superabsorbent precursor composition in a form of a mist (column 8 lines 41-46), at least in the above 1<sup>st</sup> method that, Itoh et al is taken to reasonably envision uniformly applying a radical polymerization initiator by spraying.

5. Claims 4-6, 11, 20 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al (US 4,892,754) as applied to claim 1, 18 or 28 above for reasons of record set forth in the last office action in numbered paragraph 9 dated 09-14-03.
6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al (US 4,892,754) as applied to claim 1 above, and further in view of Soderlund (US

5,248,524) and Trokhan et al (US 5,547,747) for reasons of record set forth in the last office action in numbered paragraph 10 dated 09-14-03.

***Response to Arguments***

7. Applicant's arguments filed 12-29-03 have been fully considered but they are not persuasive.

Counsel essentially argues that, Itoh et al does not teach separately applying 1<sup>st</sup> and 2<sup>nd</sup> superabsorbent compositions to a fibrous web, wherein the two compositions are applied in a form of a droplet or micro-droplet. Examiner disagrees with Counsel's characterization of the Itoh et al patent. It is respectfully submitted that, one in the art reading the Itoh patent as a whole would have reasonably recognized and appreciated that, it is envisioned in the process of Itoh et al to sequentially apply 1<sup>st</sup> and 2<sup>nd</sup> superabsorbent polymer precursor compositions to a fibrous substrate by spraying for reasons set forth in numbered paragraph 3 or 4. In any event, such would have been obvious in the art for reasons set forth in numbered paragraph 3. It is worthnoting that, **it is a notoriously common practice in the art to use a spraying technique to either impregnate or coat a fibrous web with a polymeric composition.**

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 123-345-7890.

  
Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
01-12-04